



Dallas Park & Recreation

Ewing Capital Improvement Project - Land Needs for Stormwater

City Council District 4 – MPT Carolyn King Arnold

**Park and Recreation Board
August 04, 2022**

Overview

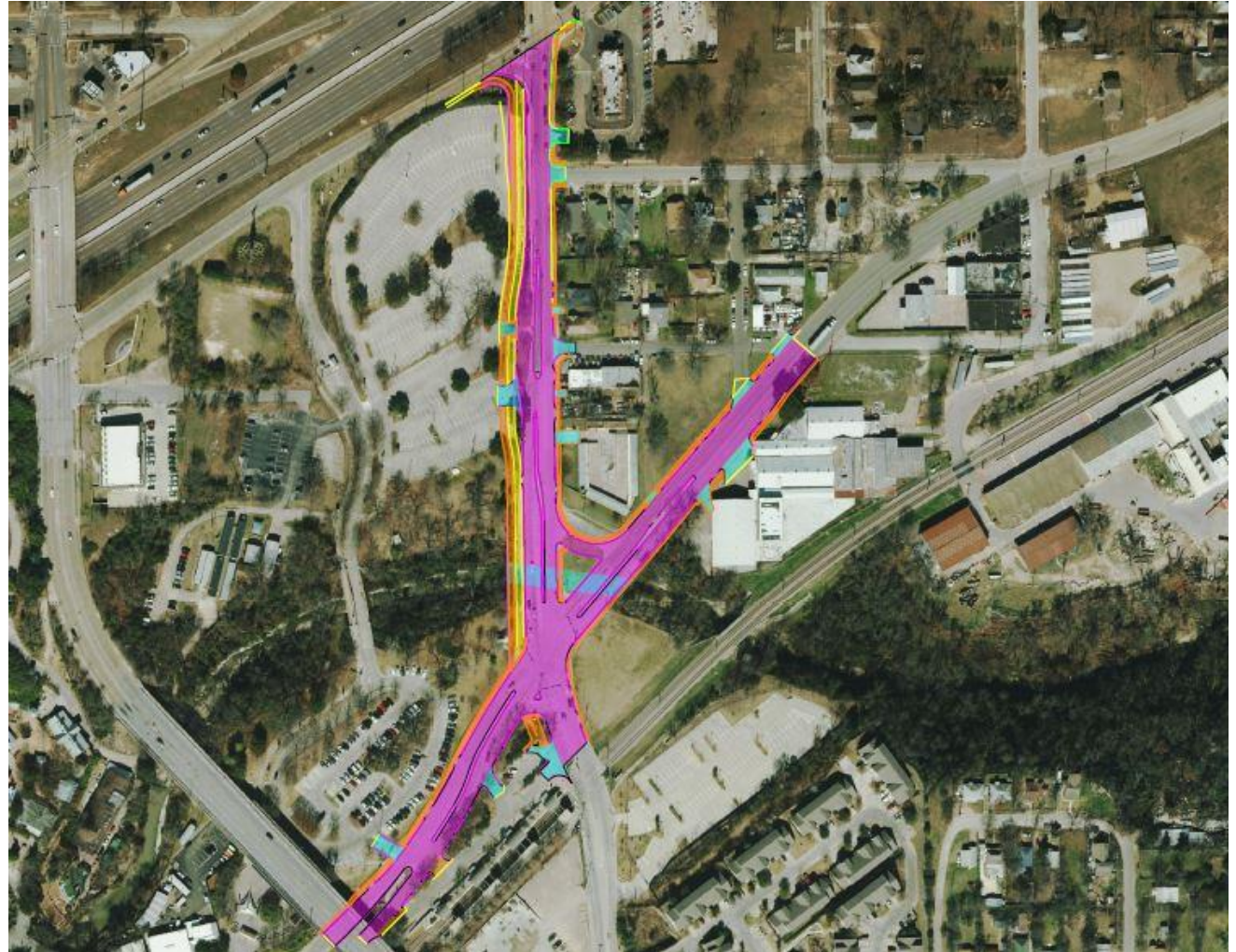
- 1) Purpose
- 2) Project Location
- 3) Existing Site Conditions
- 4) Proposed Improvements
- 5) Design Impacts
- 6) Proposed Mitigation
- 7) Project Benefits
- 8) Next Steps

Purpose

- Provide information on the Capital Improvement Project from the 2017 Bond Program located on Ewing Avenue from I35 to Clarendon Drive and on Clarendon Drive from Marsalis Avenue to Upton Avenue. The project is going to require over 17,000 cubic yards of fill within the flood plain to construct the roadway, which requires that 17,000 cubic yards of stormwater storage be provided within the project area.
 - The Public Works Department is requesting the acquisition of the Park and Recreation Department owned parcel located southeast of the Ewing/Clarendon intersection for the purpose of stormwater retention.
-

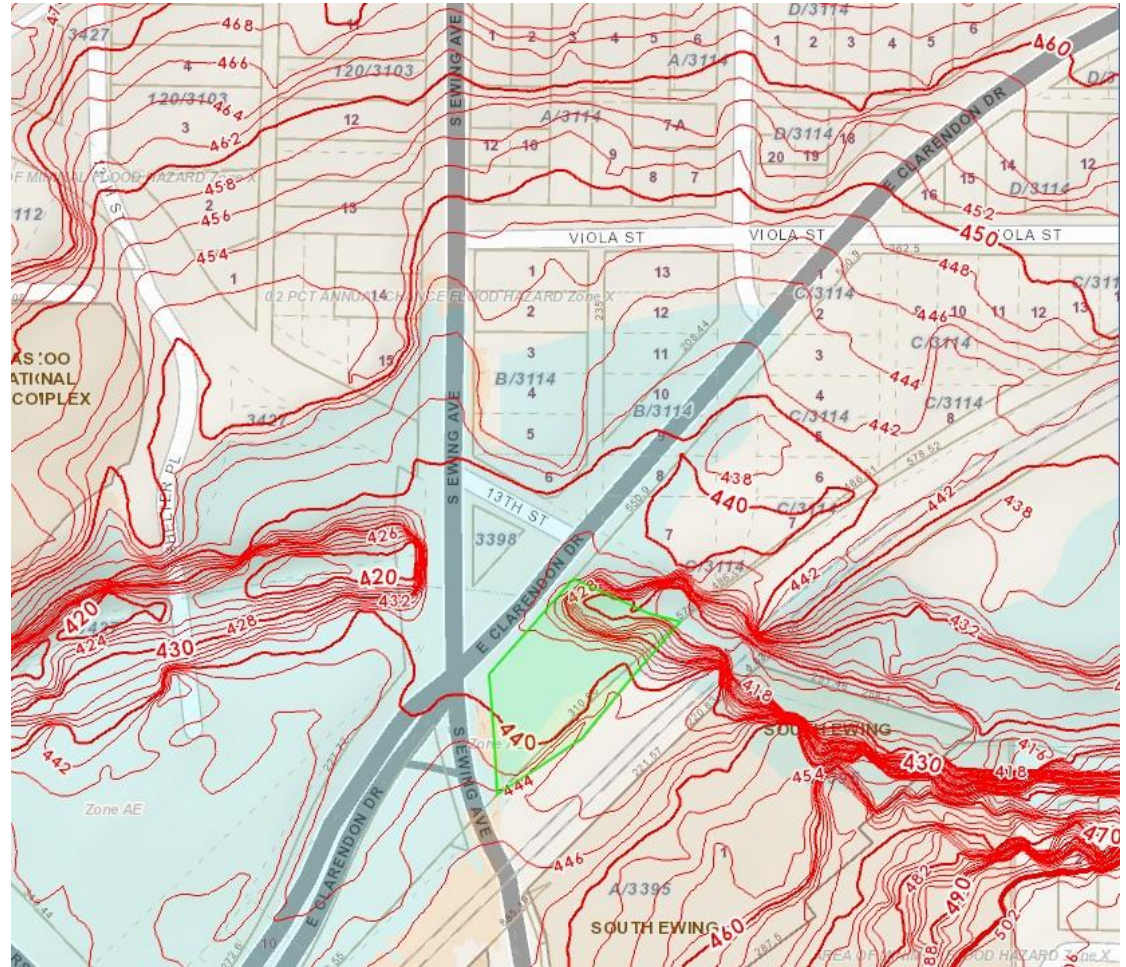
Project Location

- East side of Dallas Zoo along Ewing Avenue from I35 E to DART ROW and along Clarendon Drive from Marsalis Avenue to Upton Street



Existing Site conditions

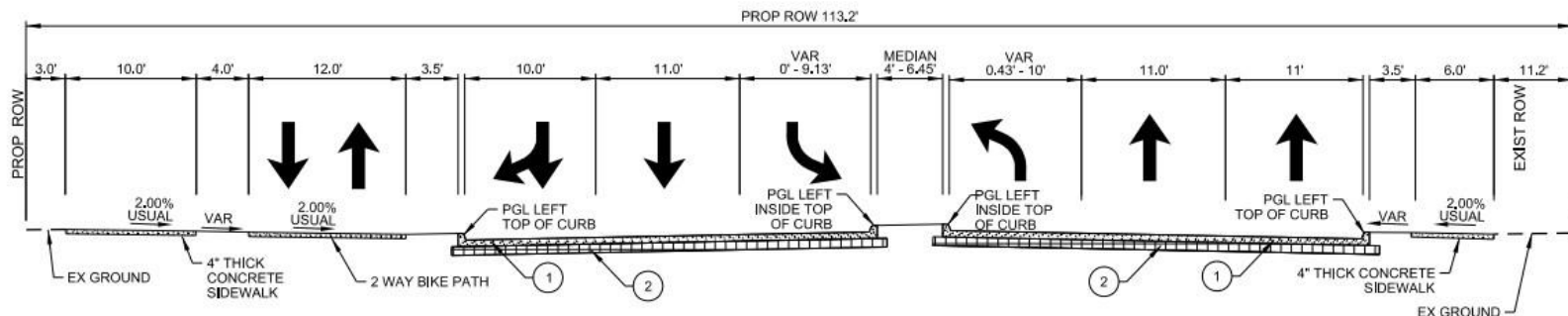
- Entire intersection of Ewing Avenue and Clarendon Drive located in floodplain footprint of Cedar Creek



Source: Dallas Appraisal District Map

Proposed Improvements

- New widened Ewing Ave.; new pavement for Clarendon Dr. at the intersection
- New bridge over Cedar Creek with 2' freeboard above 100-yr water surface elevation
- Continuous sidewalk on the south side of the intersection
- 12-ft wide off-street bi-directional bike lane on the zoo side
- 10-ft wide sidewalk to accommodate heavy pedestrian traffic on the zoo side



PROPOSED TYPICAL SECTION - EWING AVENUE
(Looking North along Ewing Blvd.)

Design Impacts

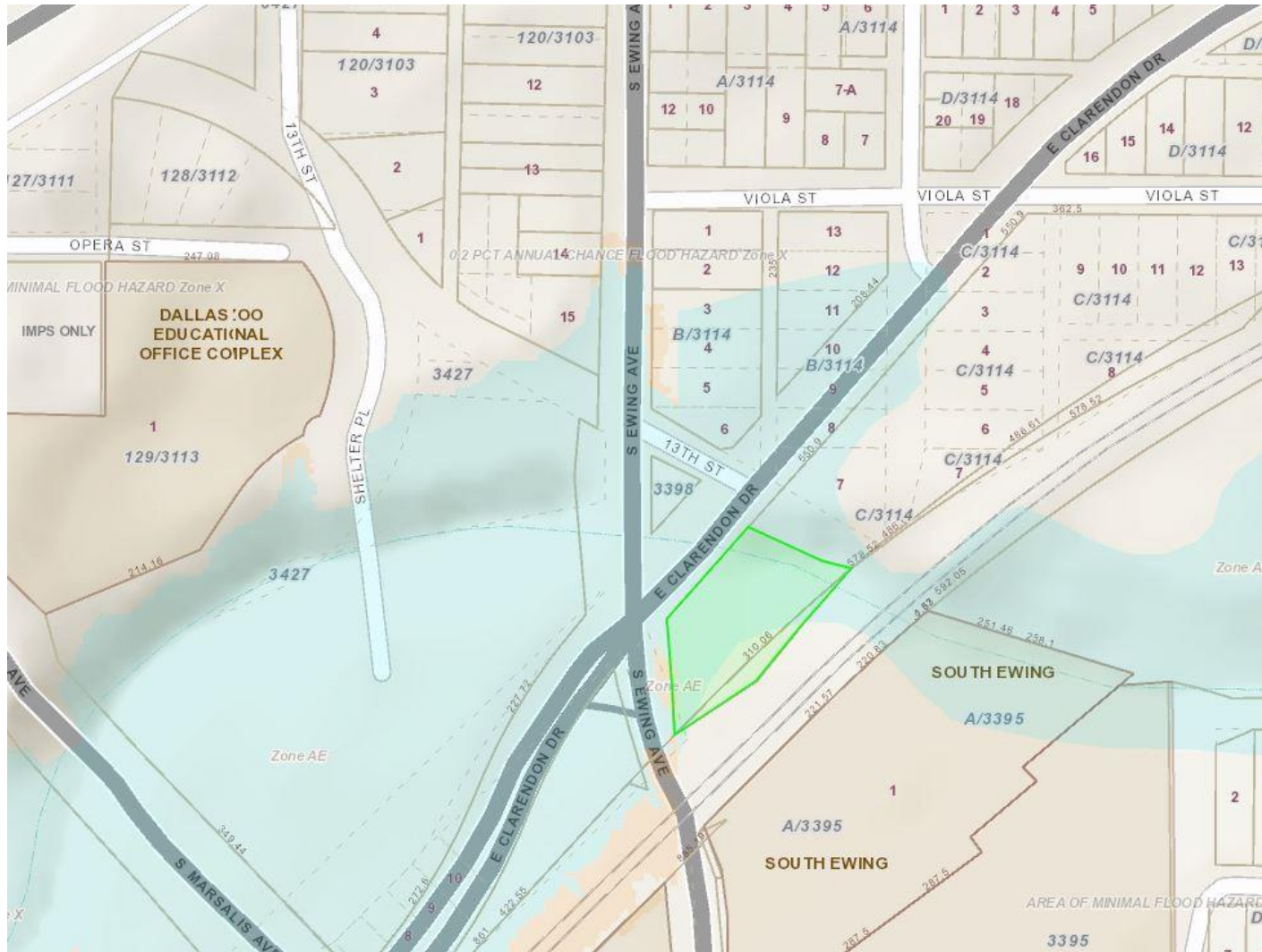
- A hydraulic study has been conducted by the Consultant Engineer based on the current hydraulic model provided by the City of Dallas.
- The bridge over Cedar Creek has been designed so that the lower chord of the bridge provides 2' freeboard above the 100-yr water-surface elevation.
- As a result: the new roadway surface is raised up above the existing surface. The highest location is about 8' higher the existing elevation. Raising the roadway surface requires a lot of retaining walls, as well as embankment. About 17,000 CY of fill is added into the area.
- Since the whole area is currently located in the floodplain of Cedar Creek, mitigation is needed for this fill volume.

Proposed Mitigation

- Surrounded by the Dallas Zoo on the west side, residential/commercial properties on the east side and DART on the south side, there is only one property that can be considered as the best candidate for the needed mitigation volume of 17,000 CY.
- Property is located southeast of the intersection and is owned by the Park and Recreation Department.
- A grading plan will be designed by the engineer to cut the area down about 19 feet to compensate for the required fill volume.

Source: Dallas Appraisal District Map

Proposed Mitigation (cont.)



Source: Dallas Appraisal District Map

Project Benefits

- Provide separate off-street bi-directional bike lane for bicyclists on the west side of Ewing Blvd (zoo side).
- Provide a very wide sidewalk on the zoo side to accommodate for heavy pedestrian traffic.
- Provide landscaping buffer in front of the Zoo.

Next Steps

- Staff asks for Park Board's comments and suggestions regarding the project and providing the land southeast of the Ewing/Clarendon intersection to the Public Works Department for the project.



Dallas Park & Recreation

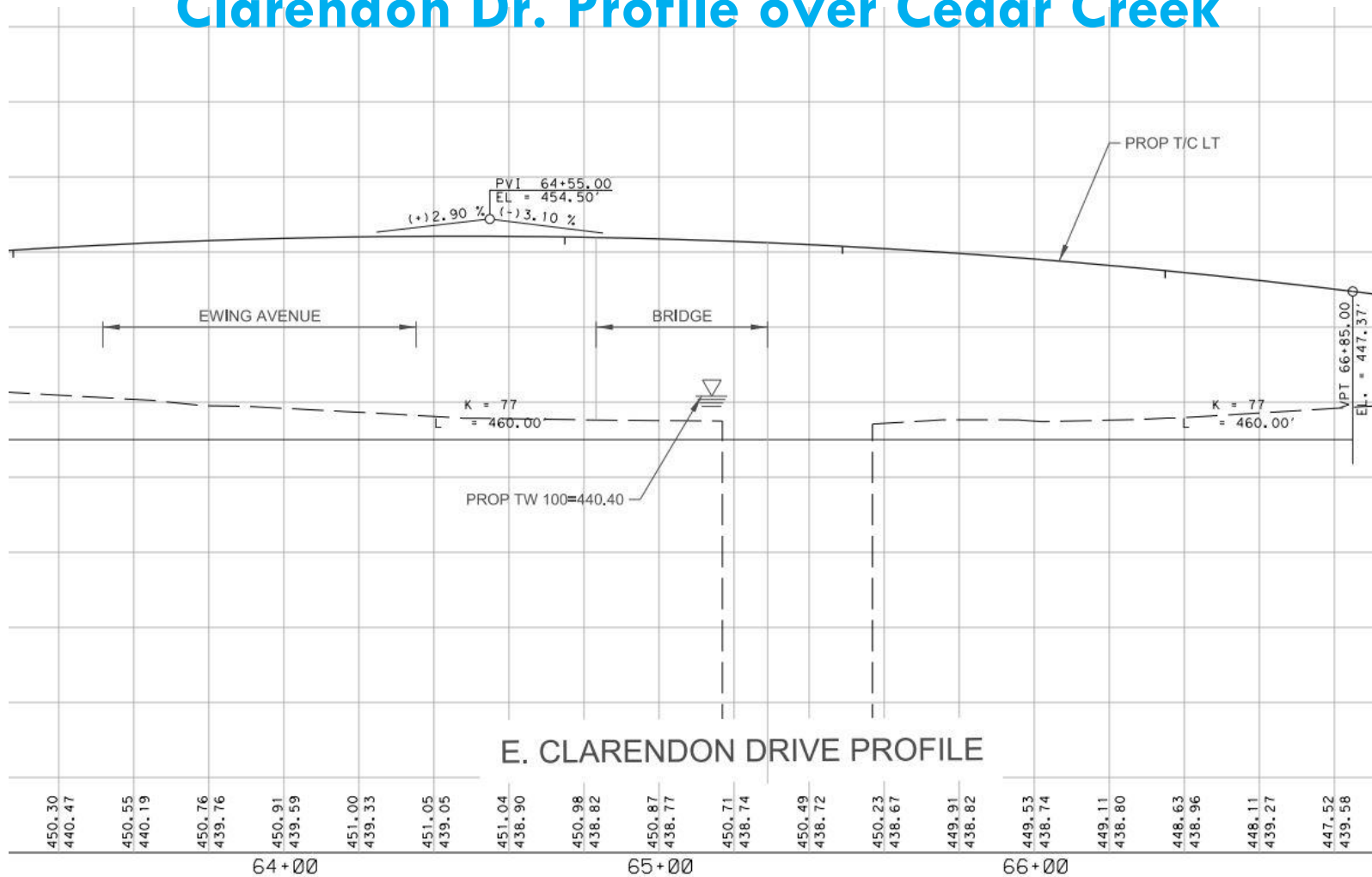
Ewing Capital Improvement Project - Land Needs for Stormwater

City Council District 4 – MPT Carolyn King Arnold

**Park and Recreation Board
August 04, 2022**

APPENDIX –1

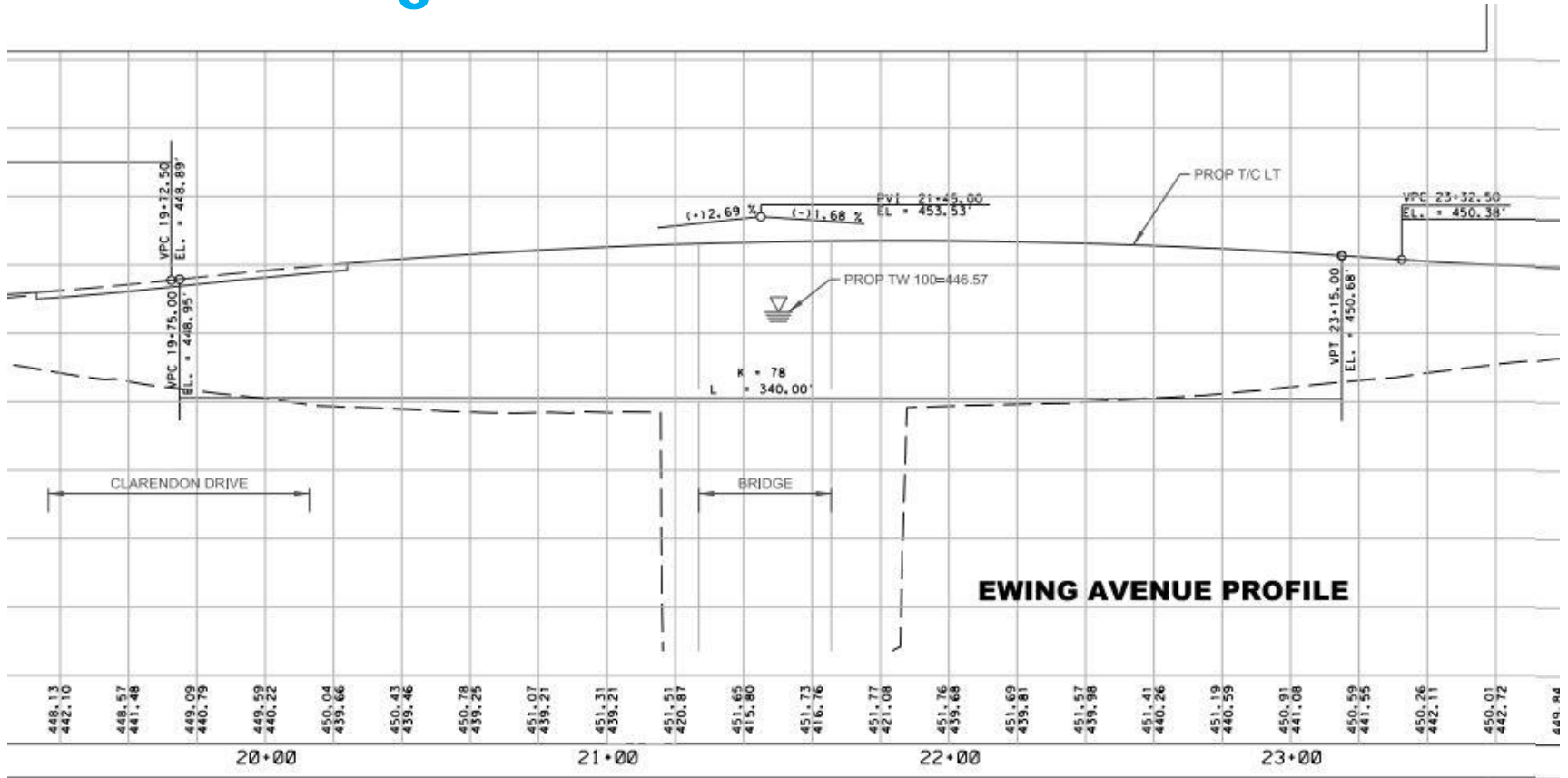
Clarendon Dr. Profile over Cedar Creek



Source: Cedar Creek Hydraulic Study

APPENDIX –2

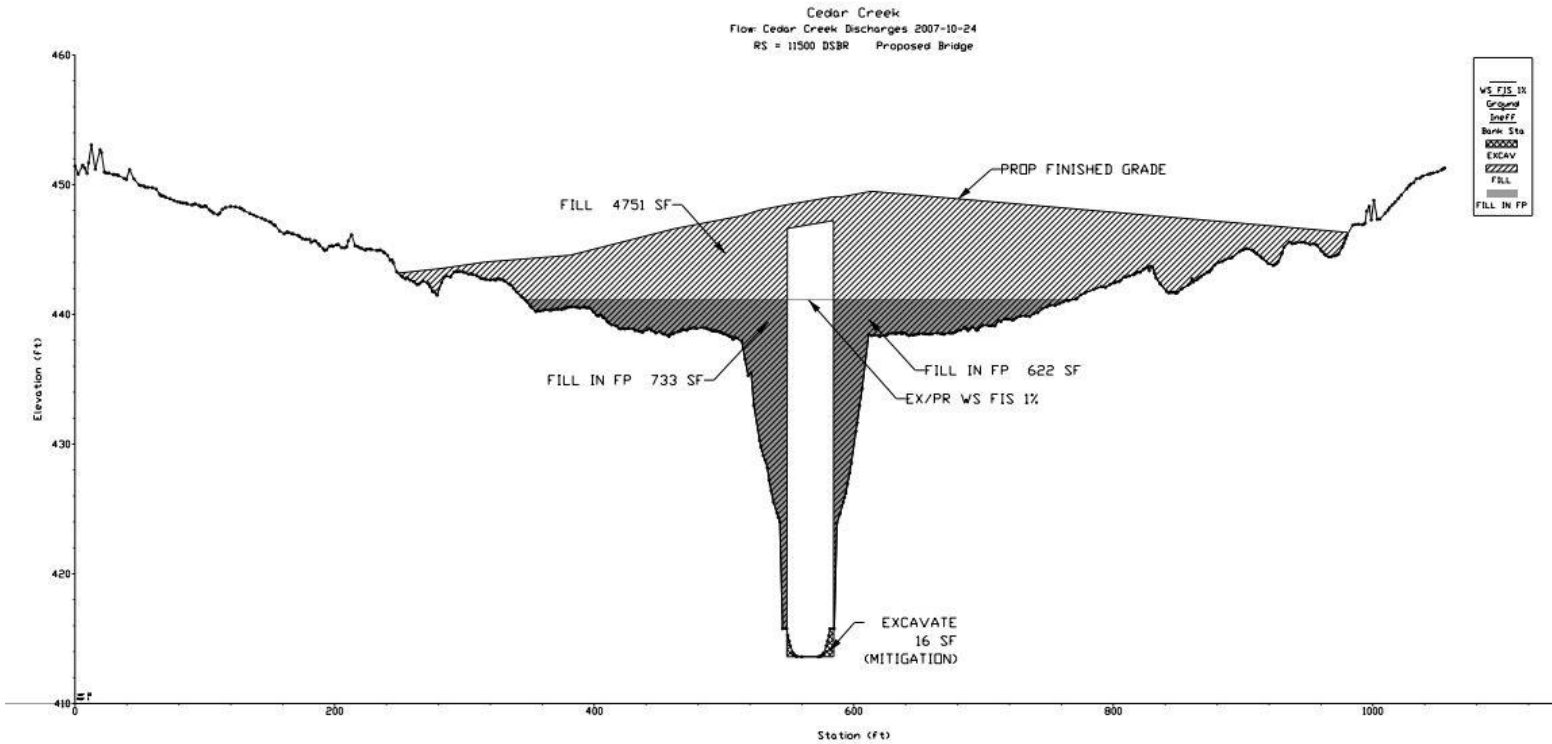
Ewing Ave. Profile over Cedar Creek



Source: Cedar Creek Hydraulic Study

APPENDIX – 3

Example of Cross Section over Cedar Creek



Source: Cedar Creek Hydraulic Study